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US Fuel Cell Council

Fuel Cells: Portable Power Applications

Individual fuel cells can be "stacked" together depending on how much — or how little — power your application requires. That's one of the technology's most appealing aspects, and is a major reason why so many companies are working to develop fuel cells for small and portable power applications.

Fuel Cells for Consumer Electronics

How many times has it happened that you've tried to use your cellular telephone only to find that you forgot to recharge your battery? If this has happened to you, then you've already come to realize the limitations of battery powered electronics. A fuel cell system for portable power applications would provide long-lasting power, and could be refueled quickly and easily.

Motorola Mechanical Technology, Inc., H-Power, Smart Fuel Cell and DCH/Enable Fuel Cells are just a few of the many companies looking to fuel cells to power small electronics. Fuel cell-powered cell phones, such as the Motorola phone above, could be refueled quickly by replacing a cartridge similar to a fountain pen ink cartridge. Motorola expects its fuel cells to run about 10 times longer than today's batteries before needing new fuel supplies.

Manhattan Scientifics, known for its success with a hydrogen-powered bicycle, the "Hydrocycle," is now working on a more humble household appliance: the vacuum. The next generation Electrolux cleaner will be cordless, create 1 kW of electricity for itself and run one to two hours. Its hydrogen container can be replaced via a simple connect-disconnect feature and Electrolux says it may deliver hydrogen bottles to customers until the containers are readily available from third parties.

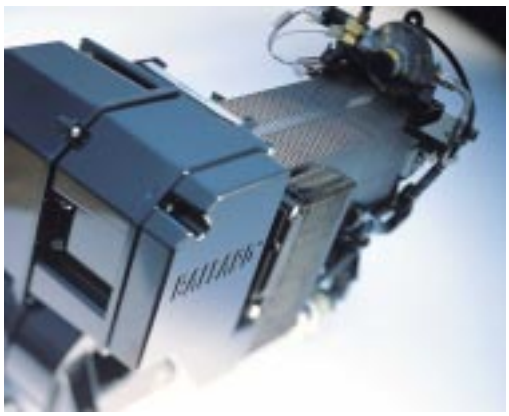
A report by Business Communications Company, Inc., notes the value of the market for fuel cells in battery-related applications is expected to grow to $1.3 billion by 2003.

Toshiba fuel cell-powered vending machine.

Fuel Cells for Remote/Portable Power

Fuel cells will also come in handy for people who need power for remote sites, or sites where the power grid is not available. Examples of remote power applications would be construction sites, campgrounds, and even festival tents.

For more information, visit our web site at www.usfcc.com.



Ballard Power System's Nexa(TM) power module for portable power. (courtesy of Ballard)

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